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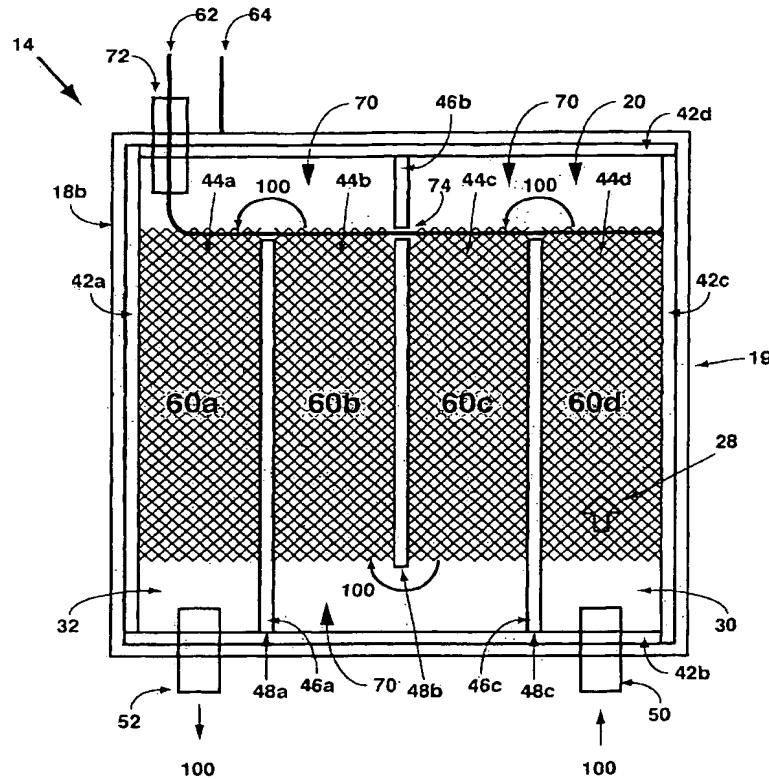
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*[Continued on next page]*

(54) Title: APPARATUS FOR GENERATING OZONE AND/OR O<sub>3</sub> USING A HIGH ENERGY PLASMA DISCHARGE



**(57) Abstract:** An electro chemical conversion cell that can break down certain gasses to provide ozone and monovalent oxygen from a supplied volume of a suitable O<sub>2</sub>-containing gas. The conversion cell is provided with at least one metal mesh electrode within a generator reaction chamber, and a power supply which is adapted to supply a high alternating electric current voltage to at least partially break-down O<sub>2</sub> in the input gas to yield ozone. A fluid flow passage extends through the reaction chamber as a generally elongated passage through the reaction cavity. The fluid flow passage extends from an upstream end, where the O<sub>2</sub>-containing gas is initially supplied into the housing, to a downstream end where treated gas either flows outwardly therefrom under pressure or is evacuated from the housing. In a simplified construction, the fluid flow passage is delineated by a series of electrically insulating plates and/or spacers which are used to partition the reaction cavity.



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GQ, GW, ML, MR, NE, SN, TD, TG).

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